UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/636,061	08/07/2003	Wayne A. Britson	ROC920030156US1	1016

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EXAMINER
BAE, JI H

ART UNIT	PAPER NUMBER
2115	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-16,18,20 and 22-33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-16,18,20 and 22-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 10-16, 18, 20, and 22-33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10-16, 23-27, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broyles et al., U.S. Patent No. 5,978,913, in view of Wookey, U.S. Patent No. 6,023,507.

Regarding claim 10, Broyles teaches a method with steps comprising:

determining when extended diagnostic testing was last performed on the computer system; and

in response to determining extended diagnostic testing has not been performed within a predefined time period, performing extended diagnostic testing on the computer system [col. 2, lines 1-14].

Broyles does not explicitly teach a graphical user interface screen to allow a user to specify periods of time associated with each of a plurality of tests.

Wookey teaches a testing system for a computer that provides a graphical user interface to allow a user to specify periods of time associated with each of a plurality of tests [co. 15, lines 6-11, Fig. 10-15].

It would have been obvious to one of ordinary skill in the art to combine the teachings of Broyles and Wookey by modifying Broyles to:

- provide a graphical user interface for specifying periods of time associated with each of a plurality of tests,

- determine for each of the plurality of tests when the diagnostic tests were last performed.

Both Broyles and Wookey are directed towards methods of diagnostic testing for computer systems. Broyles teaches at least a visual interface [col. 5, lines 62-64], and also teaches that these steps may be implemented as part of the Windows operating system [col. 6, lines 11-13], thus suggesting the combination with Wookey. Additionally, Broyles teaches that the method may include additional levels of POST testing, each with its own predetermined time period [col. 6, lines 1-10].

Regarding claim 11, Broyles teaches the step of receiving from the user an indication of the one or more diagnostic tests in the set [col. 3, lines 33-36, col. 5, lines 25-30].

Regarding claim 12, Broyles teaches the step of receiving he predefined time period from a user [col. 1, lines 61,62, user-programmable value].

Regarding claims 13 and 14, Broyles further teaches the step of examining a timestamp indicative of when extended diagnostic testing was last performed on the computer system [col. 2, lines 5-8].

Regarding claim 15, Broyles/Wookey teaches the method of claim 10. Broyles/Wookey also teaches a computer readable medium with instructions to implement the claimed method.

Regarding claim 16, Broyles teaches the providing of an indication that the one or more diagnostic tests have not been performed within the one or more corresponding specified time periods [col. 5, lines 62-64].

Regarding claim 23, Broyles further teaches the step of updating the timestamp with the current time after performing extended diagnostic testing [col. 3, lines 17-27].

Regarding claims 24 and 25, the claims are rejected based on applicant's admission of obviousness. On page 8, paragraph 0025, applicant states:

"Of course, **one skilled in the art will recognize** that, rather than rely on a stored timestamp, other timing techniques may be utilized. For example, an active timer..."

Regarding claims 26, 27, 30, and 31 Broyles teaches the steps of:

indicating extended diagnostic testing has not been performed within a specified period of time [col. 5, lines 62-64];

allowing users to choose whether or not to perform extended diagnostic testing [col. 3, lines 10-14, col. 5, lines 18-21].

Claims 18, 20, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broyles/Wookey in view of Ikeda et al., U.S. Patent No. 5,349,664.

Regarding claim 18, Broyles/Wookey teaches the method of claim 10, but does not teach a service processor. Broyles/Wookey also teaches that the invention may be practiced in a multiprocessor system [Broyles, col. 6, lines 22-25]. Since Broyles/Wookey also teach that the GUI must be displayed to the user, Broyles/Wookey also teaches a hardware management console.

Ikeda teaches a multiprocessor system which uses a service processor to perform an initial program load control [col. 1, lines 53-55].

It would have been obvious to one of ordinary skill in the art to combine the teachings of Ikeda and Broyles/Wookey by implementing the diagnostic testing using a service processor, such as the one taught by Ikeda. The disclosures of both Broyles/Wookey and Ikeda are

directed towards boot-time operations of multiprocessor systems. Although the disclosure of Broyles/Wookey suggests that the teachings may be applied to a multiprocessor, Broyles/Wookey does not fully disclose how the teachings would be adapted. Ikeda teaches that a service processor is used to control the initialization of the multiprocessor system. Based on the teachings of Broyles/Wookey and Ikeda together, it would have been obvious to one of ordinary skill in the art to use the teachings of Ikeda to adapt the teachings of Broyles/Wookey to a multiprocessor.

Regarding claim 20, Broyles teaches the step of indicating that one or more diagnostic tests have not been performed [col. 5, lines 62-64].

Regarding claims 32 and 33, Broyles teaches the steps of:

indicating extended diagnostic testing has not been performed within a specified period of time [col. 5, lines 62-64];

allowing users to choose whether or not to perform extended diagnostic testing [col. 3, lines 10-14, col. 5, lines 18-21].

Claim 22, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broyles/Wookey/Ikeda, as applied to claim 18 above, and further in view of Wang et al., "The New Testability Sins: Don't Atone, Avoid!" (available at htp://www.eetimes.com/isd/columns/OEG20010328S0050).

Regarding claim 22, Broyles/Wookey/Ikeda do not teach that the diagnostic tests comprises logical or array BIST.

Wang et al. discuss the advantaged of using BIST for testing memories [page 2-3, "Embedded memory test"].

It would have been obvious to one of ordinary skill in the art to combine the teachings of Wang with Broyles/Wookey/Ikeda. Broyles teaches that memory testing is part of the POST procedure [col. 4, lines 14-15, col. 5, lines 14-17]. The addition of Wang's teachings would improve Broyles by providing a memory test procedure that offers a number of advantages, especially for larger memory sizes.

Regarding claims 28 and 29, Broyles/Wookey/Ikeda/Wang teaches the system of claim 22. Broyles/Wookey/Ikeda/Wang also teaches the method implemented by the system, and computer readable medium with instructions to execute the method.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ji H. Bae whose telephone number is 571-272-7181. The examiner can normally be reached on Monday-Friday, 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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